

## Getting started with secondary data analysis

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# Using secondary quantitative data

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#### Overview

- What is secondary data?
- Methodology of reusing data
- Quantitative and qualitative examples
  - Key issues in re-using data
  - Key resources available
  - Activities
- Q&A

### What is secondary data?

#### **Data collector** Secondary analyst Office for **National Statistics** Data NatCen Understanding Society Sharing **Social Research** 6.5 Secondary research Primary research Data collection & analysis Re-analysis (can be for a for planned purpose different purpose)

#### Pros and cons of re-using data

#### Pros

#### Cons

- Access datasets impossible to create
- Cost effective
- Ethical issues about data collection dealt with
- No need to re-contact data subjects
- Reuse data used by others to make claims

- Do not have insider understanding of data and data collection
- Effort to get to know the data
- Ethical issues about data use to consider
- Data may not match research question
- Cannot extend studies

#### Researchers reusing data need to:

- 1. Make effort to understand the data
- 2. Be pragmatic about whether data are good enough for your purpose

#### Research plans ...



#### ... often involve repeating steps



#### How to find data

- UKDS catalogue search
- Theme pages
- Past webinars
- Further videos coming soon

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### Making sense of your data

To understand data and it's suitability for your research you must understand...

- what information was collected
- from whom
- when and where
- any changes to the raw data before being archived

#### Use the documentation

- User Guides
- Questionnaires
- Interview Schedules

Plus a variety of other resources

#### Quantitative data

- What data is available?
- Case study
- Demo What sorts of documentation are available?
- Key issues

### Quantitative data by type of analysis

Type of analysis	Type of data
Individuals, families, households, businesses : one point in time	Cross-sectional surveys
Individuals, families, households, businesses : multiple points in time	Repeated cross-sections
Individuals, families, households: over time	Longitudinal data
Small geographic areas	Census aggregate data, flow data
Comparing countries (over time)	International time series

# Case Study: Crime Survey for England and Wales (formerly the British Crime Survey)

- Example of a repeated cross-sectional survey
- Important source of information about crime (crime statistics independent from police records)
- Annual survey
- n≈35,000 individuals aged 16+ and 3,000 aged 10-15
- Victim of a crime in the previous 12 months
- Covers demographics, attitudes to the police and the CJS

# Case Study: Crime Survey for England and Wales

Data stored as individual anonymised records

	rowlabel	split	sex	yrsarea	work2
1	137068050	A (Experiences o	Female	20 years o	Yes
2	147461190	C (Crime preven	Female	10 years b	No
3	137116250	A (Experiences o	Female	20 years o	No
4	147354190	C (Crime preven	Female	20 years o	Yes
5	137061230	C (Crime preven	Female	20 years o	No
6	136898230	C (Crime preven	Female	20 years o	No
7	135507330	A (Experiences o	Male	10 years b	Yes

#### Different levels of access

- A standard End User Licence (download after registering)
- Secure Access (for sensitive information)

### Hind Khalifeh et al (2013)

Examined violence against people with disability in England & Wales

- British Crime Survey 2009/10
- introduction of disability measures
- (a special licence version of the data)
- n = 46,398 adults 16+
- 9,037 had at least one limiting disability



## Hind Khalifeh et al (2013) – Findings

Adjusting for age, sex, socio-economic characteristics...

- disability increases risk of experiencing violence
- levels of victimisation highest amongst those with mental health problems
- estimated 116,000 victims of violence attributable to disability

### Sampling considerations

- Surveys are based on samples
- Is the sample representative?
  - Who is included (adults, those in private address)?
  - Response rate and bias
  - Do you need to apply a weight to make the data representative?

#### Sampling considerations – sample size

Do I have enough cases to make a precise estimate?

Important for small sub-populations



#### Cite the Data

- Citations provided for every record and dataset
- Use the UK Data Service citation tool to copy and paste the correct citation



tation and cop	yright	
e citation for this	study is:	
NatCen Social R	esearch. (2014). British Social Attitudes Survey, 2013. [data co	ollection]. UK Data
Service, SN: 750	), <u>http://doi.org/10.5255/UKDA-SN-7500-1</u>	

#### Who was asked what?

 Computer Aided Interviewing (CAI) makes it easy to send respondents through the questionnaire by different routes

 Many questions may only be applicable to some of the sample



#### Who was asked what...

	people have s (main) job is y	your a exible ed ho orking fortnig a-half contra king, c	agreed w working ours cont g, ght, day wee act,	orking an hours), ract,	100			-		
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#### What was done with the data collected?

derived variables are created from the 'raw' data



#### Census data

We also provide access to data from the 2021 census for England and Wales, Northern Ireland and the 2022 census for Scotland when they are available. The data available is:

- Aggregate data univariate and multivariate defined tables
- Boundary data for census geographies
- Microdata safeguarded sample of individual census returns
- Flow data safeguarded data on commuting, migration, student termtime and home address and second addresses.

#### Housing deprivation by ethnicity and year of arrival in the UK



Custom dataset: Housing deprivation by ethnicity and year of arrival in the UK for London



# Using secondary qualitative data

Maureen Haaker







### Reusing qualitative data

- Types of qualitative data reuse
- Case study: School Leavers Study
- Browsing and searching for data with QualiBank
- Key issues
  - Re-contextualisation



## Many ways of re-using data

- 1. Description
  - See more data, not limited to published extracts
- 2. Research design and methodological advancement
  - Study sampling, data collection methods, topics guides
- 3. Reanalysis
  - A research question different to the original research
- 4. Restudy
  - Replicate and compare

#### SN 4867: School Leavers Study

Principal investigator: Ray Pahl

In 1978, teachers at a comprehensive school on the Isle of Sheppey were asked to set an essay about 10 days before pupils were due to leave school. They were then asked to write an imaginary account of their life over the next 30 or 40 years.





#### School Leavers Re-Study: Imagining the Future

Principal Investigators: **Graham Crow** (University of Kent) Dawn Lyon (University of Southampton)



#### School Leavers Re-Study

Essay instructions 2010: Imagining the Future:

I want you to imagine that you are towards the end of your life. Look back over your life and say what happened to you. Spread your story over your whole life from the time of leaving school.

> Sheppey: Essay 30 Group: Boys

#### My Past

I was sitting in front of the fire smoking my pipe, just thinking of the past. I was nearly seventeen when I left school, I had an apprenticeship in the Tudor Glass, an electrical apprenticeship lasting four years, I served my four years and got my diploma for an electrical engineer. I was now twenty and courting a rearly lovely girl. I had to work in London in my next job and came back home every weekend. Jobs were scarce so you had to take what you can get, I didn't want to go to London,

31

#### Living and Working on Sheppey study

**1978: 141 essays** (89 boys and 52 girls) Living without a job: how school leavers see the future

**2009-10: 110 essays** (55 boys and 55 girls) Living and Working on Sheppey project

Together, these two sets of essays shed light on the aspirations of Sheppey's young people (and young people more generally) and cover a range of topics including:

• Health, Education, Career, Family and Leisure

#### Comparing the responses from 1978 and 2010

1978	2010
Mundane & grounded jobs; gradual career	Well-paid, instantaneous jobs; choice but
progression; periods of unemployment.	uncertainty; influence of celebrity culture.
"It was hard finding a job, I failed a few chances, but	"I was 20 now living the dream I had a amazing
eventually got what I wanted locally, a craft	bandI had toured the world 3 times sold 4 million
apprenticeship." (Essay 27, male)	records." (Essay 30, male)
"When we found a house it was a semi-detached in Sittingbourne. I wanted to live in Italy but that was asking for too much." (Essay 56, male)	"I arrive at my 3-bedroom luxury villa; I land my helicopter on my own heli-pad and walk inside. I grab my keys and jump in my Bentley Continental GTS." (Essay 40, male)
"I longed for something exciting and challenging. But yet again I had to settle for second best. I began working in a large clothes factory." (Essay 104, female)	"In my future I want to become either: a dance teacher, hairdresser, or a Professional Show Jumper/horse rider. If I do become a dancer my dream would be to dance for Beyoncé or someone really famous." (Essay 61, female) <sup>33</sup>

#### http://www.livingandworkingonsheppey.co.uk/





Welcome to this website where you can find material from two research projects about the lsle of Sheppey!

Our latest work (2013-14) is a project called **Imagine Sheppey** which is about how young people imagine the future. This builds on our previous work in **Living and Working on Sheppey: Past, Present and Future** (2009-11) where we explored the history and changes in working lives on Sheppey in the last decades of the 20th century and into the 21st. You can find out about both projects here!

If you are curious about young people and wonder about how they see the world and themselves within it, and what they imagine their futures have in store for them, you might be interested in:

Our Imagine Sheppey Fast Forward video made by the artists, Tea – coming soon!
 Reading and listening to short essays written by young people in 2009-10 where they talk

#### Home Imagine Sheppey Fast Forward Fast Forward Workshops Imagine Sheppey Fast Forward Video Living and Working on Sheppey Older people's memories Young people and the future 1978 Essay Writers Facebook Page Ray Pahl's Sheppey Studies

Ray Pahl's Sheppey Studies Access to data

## Finding Qualitative Data

UK Data Service					Q Sea	arch the site	·		Login to C	)ualiBank
Find data Deposit data	Learning hub T	raining and events				About	News	Impact	Help	Contact
Data Catalogue		Discover > QualiBa	nk	on of qualit.	ative surveys, ii	nterview and	d open-end	ed question	15.	
Variable and question bank <ul> <li>QualiBank</li> </ul>			r qualitative data					GO		
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Resource type	+									
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Date	+	_								
Sex	+	-								
Age group	+	-								
Socio-economic status	+	-								

Data Catalogue Variable and question bank QualiBank			on of qualitative surveys, interview	and open-ended questions.
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Resource type	+	typhoid and typhoid _ typhoid or	udio	
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Date	+	Displaying 1-10 of 22 results	ion Monthe Depart for a mind 4 Mar	1 2 3
Sex	+		sion Morale Report for period 1 May Intelligence Reports, 1941-1949	- 30 Sep 47
Age group	+		ent instructions in the period that m	ases. 13. Finance, Pay and Alowance (a) Officers nany officers are confused as to the method of
Socio-economic status	+			Access this collection from the Data Catalog
Region	+	<ul> <li>Summary of the interview of SN6226 Pioneers, 1996-201</li> <li>Sex: Female. Age group: 75</li> <li>East of England.</li> </ul>	12	managerial/admin/professional. <b>Region:</b> to
			love with the Navy. Trainings for D-	at 17, to sign up to join the Services. Joined the Day off North-East Scotland. Then in Signals Off
				Access this collection from the Data Catalog

#### Interview with Mrs. Omison

scover			
riable and question bank	External resources	Collection documentation	Access this collection from the Data Catalogue
JaliBank	DETAILS		~
	Collection ID (SN):	2000	
eate citation	Title: Principal investigator:	<u>Family Life and Work Experience Bef</u> Thompson, P., University of Essex. D Lummis, T., University of Essex. Depa	epartment of Sociology
	Sex:	Female	
	Age group:	75-84	
	Socio-economic status Region:	North West	
	Licence:	Creative Commons Attribution 4.0 In	iternational License.
	+ Additional metadata	а	
	INTERVIEW TRA	NSCRIPT	~
	R: 149 Lee Gate, Har	wood, Bolton.	
	I: And your marital	status? You're a widow, are you?	
	R: Yes.		
	I: Can you tell me w	hat year you were married?	
	<b>R:</b> June 18th, 1938.		
	I: And the year whe	n you were born?	

	R: Oh yes, that was done. The Maypole dances.
Create citation	I: Where did they have the Maypole?
	R: Well of course I remember St. Osyth Priory - I lived just inside St. Osyth then you see, my father and mother moved from Angers Greer to - I told you about the barracks - we moved there when I was - not more than about two I suppose.
	I: And you lived on there for quite a while didn't you?
	R: I lived there 'til I got married. Yes.
	I: Why did they make that move?
	R: Well, of course they moved - lived in a house at Angers Green, I don't know who that belonged to but then of course as these barrack cottages became vacant I mean the farmer usually put his men in them you see. That was why my father moved 'cos-;
	I: It wasn't because he changed his employer?
	R: Oh no, the house went with the job you see.
	I: And at St. Osyth in Priory they used to have a Mayday do did they?
	R: Oh yes. Well they had - a lot of big do's there when I was a kid, I mean, I belonged to the Sunday school, I used to have all their treats there - their summer treats you know. And of course the woman then who had it - was a very rich woman you see those days, I mean they had about seventeen gardeners and - and seventeen or eighteen indoor staff.
	RELATED RESOURCES
	Related external resources
	XML TEI Transcript
	XML QuDEx metadata Web Resource: Abstract of the Edwardians book
	Related audio
	Audio extract from Interview with Mr. Keble

Audio extract from Interview with Mr Keble

	Did he ever look after you while your mother went out?     No, no. me mother never had a chance to go out. If there was anything on at the school and we too	ok part in it,	me mother
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RETRIEVE CITATIC	Citation A unique citation reference has been generated based on your selection.	~	s, one used or me eep the shop nes when we
	Thompson, P., University of Essex. Department of Sociology, Lummis, T., University of Essex. Department of Sociology: "Interview with Mrs. Omison" in "Family Life and Work Experience Before 1918, 1870-1973" 7, UK Data Service [distributor], 2009-05-12, SN:2000, Para. 186. http://dx.doi.org/10.5255/UKDA- SN-2000-1, https://discover.ukdataservice.ac.uk/QualiBank/Document/? Select the text above	~	l say, we'd girl? Helping
	You can copy and paste this citation as required in your outputs. This citation includes a URL which will link directly back to this page, where the cited text will be highlighted.		
		~	

## Getting started

Orient yourself to the original research project

Documentation and metadata

Understand the structure of the original data

- Context at 3 levels
- Sampling and recruitment

## Become familiar with the project data as a whole

- Logic of subsampling is volume prohibits reading it all
- Both inductive and deductive strategies can work



Mandy Winterton

#### Get connected

http://ukdataservice.ac.uk/about-us/contact.aspx

https://www.jiscmail.ac.uk/cgi-bin/webadmin?A0=UKdataservice

https://twitter.com/UKDataService @UKDataService

https://www.facebook.com/UKDataService

https://www.youtube.com/user/UKDATASERVICE

\*\*\*Powerpoint slides will be available on our website in due course and you can catch up on the recording on our Youtube channel. Check out our Twitter for more updates.\*\*\*





## Thank you.

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